

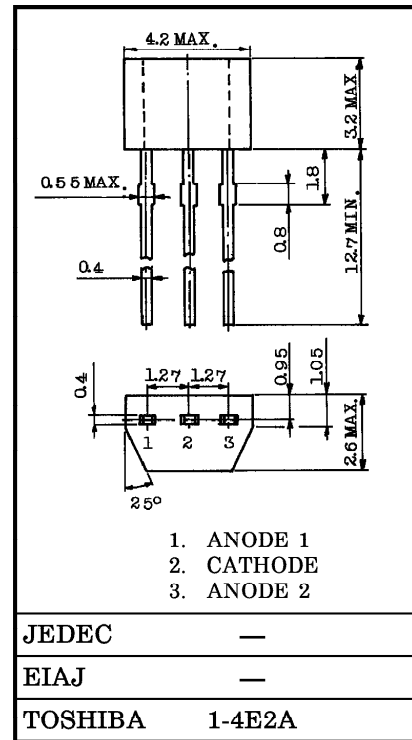
TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

# 1SV103

FM RADIO BAND TUNING APPLICATIONS.

Unit in mm

- Low Series Resistance :  $r_s = 0.35\Omega$  (Typ.)
- Small Package.



MAXIMUM RATINGS (Ta = 25°C)

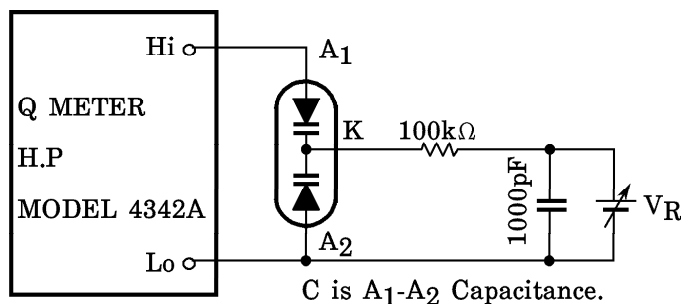
CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	$V_R$	32	V
Junction Temperature	$T_j$	125	°C
Storage Temperature Range	$T_{stg}$	-55~125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 0.13g

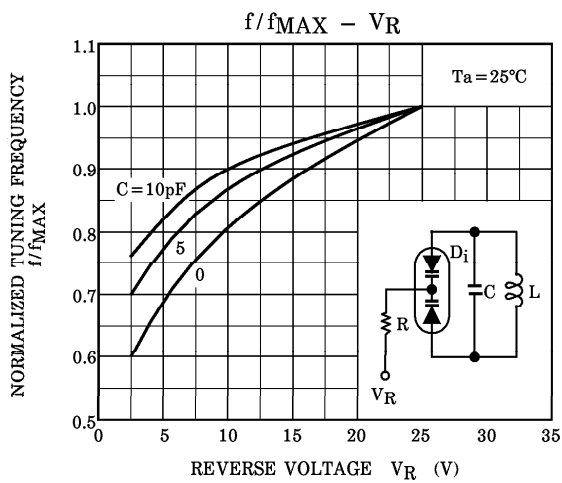
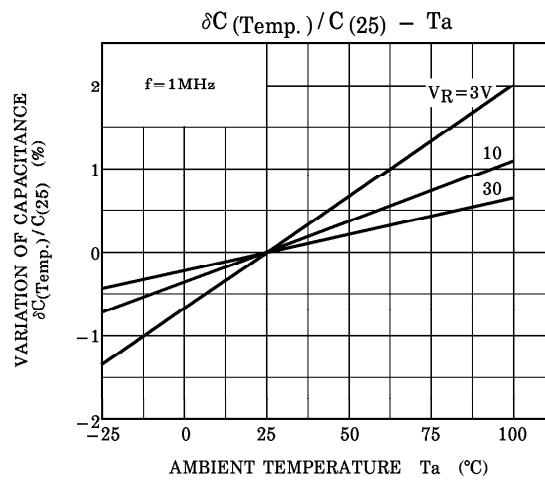
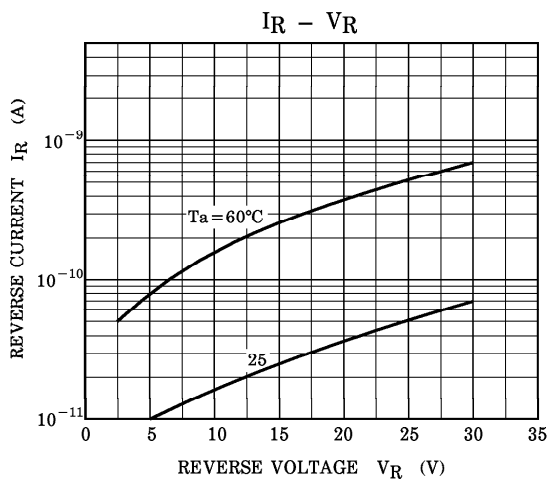
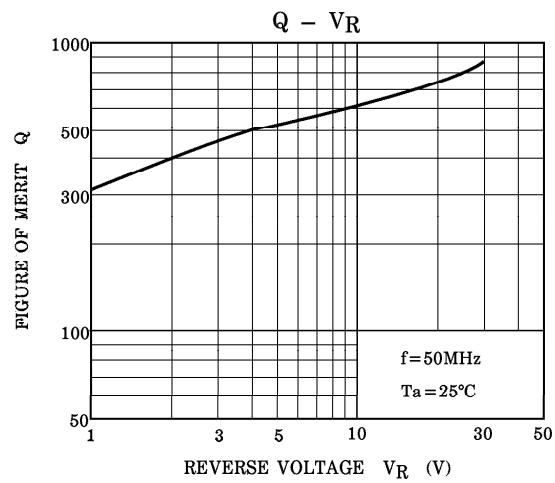
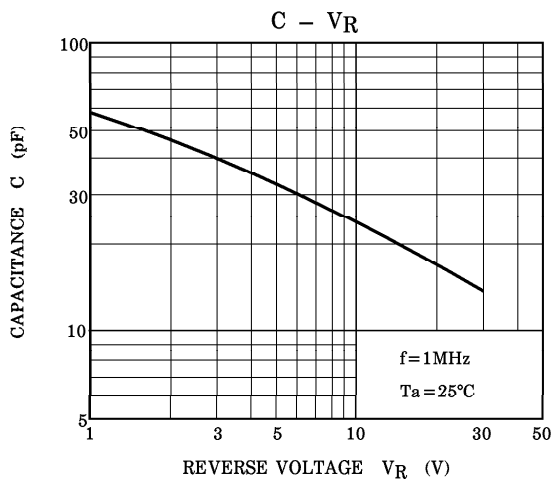
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$V_R$	$I_R = 10\mu A$	32	—	—	V
Reverse Current	$I_R$	$V_R = 30V$	—	—	50	nA
Capacitance	$C_{3V}$	$V_R = 3V, f = 1MHz$	37	—	42	pF
Capacitance	$C_{30V}$	$V_R = 30V, f = 1MHz$	13.2	—	16.2	pF
Capacitance Ratio	$C_{3V} / C_{30V}$	—	2.6	—	2.9	
Series Resistance	$r_s$	$C = 20pF, f = 50MHz$ (Note)	—	0.35	0.60	$\Omega$

Note :  $r_s$  Test circuit



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